

ASAP

Rev B J, 3/10/23

~~PRELIMINARY ISSUE~~

Work Order ID 98550

\*98550\*

Item ID: D4664-5 Accept \*N900040100\* Setup Start \*NS1\*  
Revision ID: Stop \*NS2\*  
Item Name: Spacer  
Start Date: 3/13/13 Start Qty: 12.00 \*12\* Cust Item ID:  
Required Date: 3/15/13 Req'd Qty: 12.00 \*12\* Customer:  
Reference:

Approvals: Process Plan: W Date: Tooling: Date: Run Start \*NR1\*  
QC: Date: SPC (Y/N): Date: Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4664	rev a <del>982</del> <u>Rev B Sns</u>								
100	Hardinge CNC LATHE SMALL	0.00				12	Ø		
*100*									
Hardinge	Memo	0.00							
Hardinge CNC Lathe Small	1-Turn as per Folio and dwg Folio Rev: <u>N/A</u> Dwg Rev: <u>NTS</u> -Deburr								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
*110*									
QC	Memo	0.00							
Quality Control									

PO 13/03/14

PO 13/03/14

# Work Order ID 98550

\*98550\*

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March-13-13 12:44:20 PM

Item ID: D4664-5 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Spacer  
 Start Date: 3/13/13 Start Qty: 12.00 \*12\* Cust Item ID:  
 Required Date: 3/15/13 Req'd Qty: 12.00 \*12\* Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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120

QC8- Inspect parts - second check

0.00

\*120\*

QC

Memo

0.00

Quality Control

130

Identify as per dwg & Stock Location: *DMH*

0.00

\*130\*

Packaging

Memo

0.00

Packaging

140

QC21- Final Inspection - Work Order Release

0.00

\*140\*

QC

Memo

0.00

Quality Control

ST119SPB5-30 (12X)

ATIVE RECALL

12/03/13

AUTH

DATE 13/05/13

TO REV B

13/5/31

Chemical Conv. Coat.

QC7. Inspect Chemical Coat.

12-26-13-3-22

12 13.305

inspected as per spec

13-5-30

# Picklist Print

March-13-13 12:44:19 PM

Page 1

Work Order ID: 98550

Parent Item: D4664-5

Parent Item Name: Spacer

Start Date: 3/13/13

Required Date: 3/15/13

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP REV:A NEW ISSUE 12-11-08 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
<del>MDELRL000</del> Delrin Round Bar 1"		Purchased	No				f	0.0000		0.4042105		4.00	

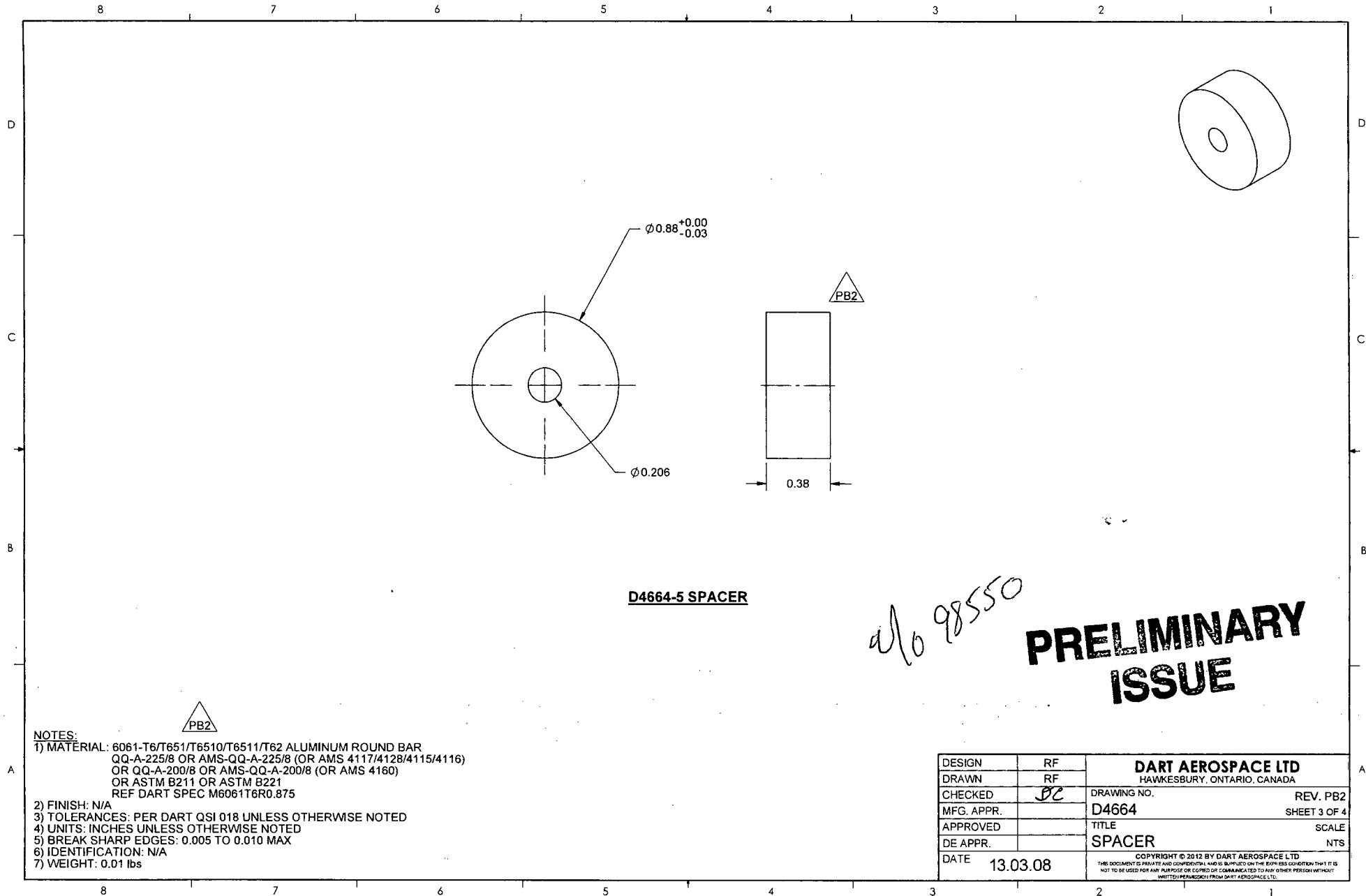
M6061T6 Round bar

PO 13/03/14

→

M 116406

.400





## Receiving Report

Date: 10/12/13

Batch No: m116404

Supplier: Phyomenburg

Dart P/O: 13093

Packing Slip: Yes ☒ No ☐  
 Invoice: Yes ☐ No ☒  
 Receipt: Cash ☐ Cr ☐

Release Note Attached: Yes ☒ No ☐ N/A ☐  
 Waybill Attached: Yes ☒ No ☐  
 Shipment Complete: 8 Yes ☒ No ☐ N/A ☐  
 QC6 Inspection 8 N/A ☐  
 Work Order 10124 N/A ☐

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments

Initials of receiver (if shipment OK) Level 12 CZ

Production/Admin:

Date 10/12/14

Location \_\_\_\_\_

Received/Costing

Initial CZ

## Purchase Order Receipt Listing

Page 1 of 1

December 14, 2010 10:19:30 AM

**All amounts are calculated in domestic currency.**

All Vendors   PO ID po13093   All Receipt Dates   All Line Item Types

All Item ID/GL/WOs   All Rec. Employees   All Currencies

Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
<b>VendorID\Vendor Name</b>		<b>VC-COP001</b>	<b>Thyssenkrupp Materials CA Ltd</b>								
PO13093	1		M6061T6B00750X00 f .125		12/13/10	12/14/10	80.0000	\$0.25	0.0000	0	\$19.80
CAD	No		6061-T6 Bar .750 x f .125 116406		80.0000	LAVO01		\$19.80	0.0000	0	
	2		M6061T6B1.000X12. f 000		12/13/10	12/14/10	12.0000	\$31.17	0.0000	0	\$374.00
	No		6061-T6 Bar 1.00 x f 12.00 116406		12.0000	LAVO01		\$374.00	0.0000	0	
	3		M6061T6B1.500X01. f 500		12/13/10	12/14/10	12.0000	\$5.87	0.0000	0	\$70.40
	No		6061-T6 Bar 1.50 x f 1.50 116406		12.0000	LAVO01		\$70.40	0.0000	0	
	4		M6061T6R0.750 f		12/13/10	12/14/10	48.0000	\$1.19	0.0000	0	\$57.20
	No		6061-T6 Round Bar f .750" 116406		48.0000	LAVO01		\$57.20	0.0000	0	
	5		M6061T6R1.000 f		12/13/10	12/14/10	24.0000	\$2.11	0.0000	0	\$50.60
	No		ROUND BAR 1.00" f  116406		24.0000	LAVO01		\$50.60	0.0000	0	
										Total Received Quantity:	176.0000
										Total Qty to Inspect (PO U/M):	0.0000
										Total Reject Quantity:	0.0000
										Total Receipt Value:	\$572.00
										Total Balance Due Quantity:	0.0000

## B I L L O F L A D I N G

No: PEC 687483

Ship From:  
 THYSSENKRUPP MATERIALS NA  
 2821 LANGSTAFF ROAD  
 CONCORD, ONTARIO L4K 5C6  
 Tel: 905 669 9444 Fax: 9057389033

Ship Date 10Dec10 at 8:32 From PFW  
 Probill T151012  
 Via APEXMOTOR-PEC  
 FOB CONCORD  
 Frt PREPAID  
 Route 0- 0 Manifest  
 Vhcle Trailer  
 Slp TRINA VINCE (905-532-1365)  
 Sold To: ( 20115)  
 DART AEROSPACE  
 1270 ABERDEEN ST  
 HAWKESBURY, ON K6A 1K7

Ship To: ( 1)  
 DART AEROSPACE  
 1270 ABERDEEN ST  
 HAWKESBURY, ON K6A 1K7  
 Tel: 613-632-9577 Fax: 613-632-1053

## B I L L O F L A D I N G

1) Our Order PEC-282304- 1 Your PO # 13093  
 Part # Rel # CHANTAL

ALUMINUM FLAT BAR 6061-T6511  
 .125" x .750" X 240.0000" ✓ *CL 10/12/13*

MTR

Heat Number	Tag No	Quantity	PCS	Wt LBS
10081183a	145078	80 FT	4	9

2) Our Order PEC-282304- 2 Your PO # 13093  
 Part # Rel # CHANTAL

ALUMINUM FLT BAR ECONOPLT 6061-T6511 ✓ *CL 10/12/13*

MTR

Heat Number	Tag No	Quantity	PCS	Wt LBS
201012176	145079	12 ' .5000 "	1	170

3) Our Order PEC-282304- 3 Your PO # 13093  
 Part # Rel # CHANTAL

ALUMINUM SQUARE BAR 6061-T6511 ✓ *CL 10/12/13*

MTR

Heat Number	Tag No	Quantity	PCS	Wt LBS
20612202	145080	12 FT	1	32

4) Our Order PEC-282304- 4 Your PO # 13093  
 Part # Rel # CHANTAL

ALUMINUM ROUND BAR 6061-T6511 ✓ *CL 10/12/13*

MTR

Heat Number	Tag No	Quantity	PCS	Wt LBS
11530	145081	48 FT	4	26

Page: 1 ....Continued

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE  
 RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.  
 MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.



## B I L L O F L A D I N G

No: PEC 687483

Ship From:  
THYSSENKRUPP MATERIALS NA  
2821 LANGSTAFF ROAD  
CONCORD, ONTARIO L4K 5C6  
Tel: 905 669 9444 Fax: 9057389033

Ship Date 10Dec10 at 8:32 From PFW  
Probill T151012  
Via APEXMOTOR-PEC  
FOB CONCORD  
Frt PREPAID  
Route 0- 0 Manifest  
Vhcle Trailer  
Slp TRINA VINCE (905-532-1365)  
Sold To: ( 20115)  
DART AEROSPACE

Ship To: ( 1)  
DART AEROSPACE

## B I L L O F L A D I N G

5) Our Order PEC-282304- 5 Your PO # 13093  
Part # Rel # CHANTAL  
ALUMINUM ROUND BAR 6061-T6511  
1.00" DIA X 144.0000" *20101213*

MTR

Heat Number	Tag No	Quantity	PCS	Wt LBS
201012067	145082	24 FT	2	23

TOTAL:	Tags	PCS	LBS
	5	12	260

Heat Number \*\*\* Chemical Analysis \*\*\*  
10081183a  
11530  
201012067  
201012176

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT  
WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR  
TO SHIPPING.

ATTN: CHANTAL/LINDA

\*\* ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER \*\*  
\*\* REFERENCED ON IT \*\*

TOTAL 2 BDLS G.W. 291 LBS

ITEM (1) BDL  
ITEMS (2,3,4,5) BDL

\*\*\*\*\* CLOSED FOR THE HOLIDAYS \*\*\*\*\*  
FROM DEC. 25TH TO 28TH, ON DEC. 31ST & JAN. 3RD.  
WE ARE OPENED FOR BUSINESS ON DEC. 29TH & 30TH.  
HAVE A HAPPY HOLIDAY SEASON!  
\*CUSTOMER PICK-UP HRS AT THYSSENKRUPP MATERIALS NA

Page: 2 ....Continued

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE  
RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.  
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO13093**

Purchase Order Date 12/08/10

PO Print Date 12/08/10

Page Number 2 of 2

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD  
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL "A"  
TORONTO, ON M5W 5V8  
CA

Contact Name

Vendor Phone 905 669 9444

Vendor Fax 905 738 9033

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

10127-2607

Tax Resale Nbr

Net 30

Terms

Currency

CAD

FOB

Destination-Collect

4	M6061T6R0.750 CL 10/12/13	6061-T6 Round Bar .750"	12/13/10 Yes	48.00 f	Yours ppd	\$1.1917	\$57.20
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Special Inst: MATERIAL: 6061-  
T6/T651/T6510/T6511/T62 ALUMINUM  
ROUND BAR  
AS PER: QQ-A-225/8 OR AMS-QQ-A-  
225/8 OR AMS 4117/4128/4115/4116 OR  
QQ-A-200/8 OR AMS-200/8 OR AMS 4160  
OR ASTM B221 OR ASTM B221

5	M6061T6R1.000 CL 10/12/13	ROUND BAR 1.00"	12/13/10 Yes	24.00 f	Yours ppd	\$2.1083	\$50.60
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Special Inst: AS ABOVE

PO Total:

\$572.00



Change Nbr: 1

Change Date: 12/08/10

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE  
ALUMINUM ROUND BAR 6061-T6511  
1.00" DIA X 144.0000"  
PART NO.

PO/Rel 13093 /CHANTAL

We certify that this is a true copy of the report  
furnished by the producer of the metal, or data  
resulting from tests made in approved labs.

Signed by: \_\_\_\_\_

## Certificate of Mill Test Results

BL PEC-687483-005

10Dec10  
Pg 1/2



SERVICE CENTER METALS  
5850 Quality Way  
Prince George, VA 23875

### CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS

OUR ORDER NUMBER	ITEM
117111	3

**BILL TO**

ThyssenKrupp Materials NA

**SHIP TO**

ThyssenKrupp Materials NA PEC

Quantity Certified 2,260 lbs 204pcs

**MANIFEST NUMBER**

117656

**CUSTOMER PO**

PEC-225368

**CUSTOMER PART NUMBER**

RD0005

**DIE NUMBER**

RD0005

**ALLOY / TEMPER**

6061-T6511

**DESCRIPTION**

ROD 1.000 +/- .004

**DATE OF SHIPMENT**

10/22/2010

**SALESPERSON**

David Schroeder

**CERTIFICATION**

ASTM-B221-08 StencilContinuous

**SPECIFICATION**

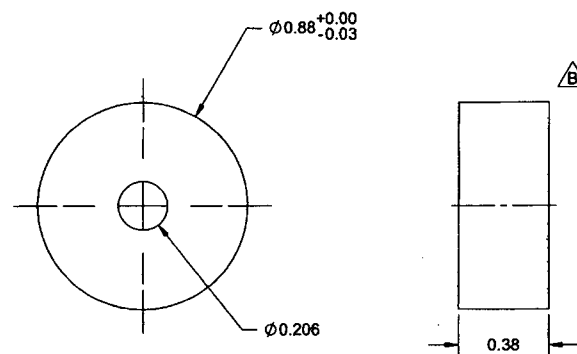
AMS-QQA-200/8

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. SCM extrusions are manufactured in the USA from ingot melted and cast in the United States or Canada.

Items produced and certified as 6061-T6511 also meet the requirements of 6061-T6

#### Mechanical Properties

Test No.	Lot No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
91	201012067	09/26/10	54.0	50.4	19.5
92	201012067	09/26/10	56.5	53.0	18.0
93	201012067	09/26/10	54.0	50.4	19.5
94	201012067	09/26/10	53.2	49.8	19.5
95	201012067	09/26/10	54.4	50.4	17.5
96	201012067	09/26/10	52.8	49.0	16.5
97	201012067	09/26/10	54.2	50.5	19.5
98	201012067	09/26/10	54.4	50.9	18.5
99	201012067	09/26/10	56.3	52.6	16.5
100	201012067	09/26/10	52.6	48.7	15.5
101	201012067	09/26/10	52.4	48.6	18.5
102	201012067	09/26/10	53.7	49.9	18.5
103	201012067	09/26/10	52.5	48.7	16.5
104	201012067	09/26/10	52.8	48.8	17.5
105	201012067	09/26/10	54.0	50.3	19.5



**D4664-5 SPACER**

**RELEASED**  
 2013-04-02  
 MD

- NOTES:**
- 1) MATERIAL: 6061-T6/T651/T6511/T62 ALUMINUM ROUND BAR  
 PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
 OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
 OR ASTM B211 OR ASTM B221  
 REF DART SPEC M6061T6R0.875
  - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 0.01 lbs

DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	SC	DRAWING NO. <b>D4664</b>	REV. B
MFG. APPR.	ST	SHEET 3 OF 4	
APPROVED	ST	TITLE <b>SPACER</b>	SCALE NTS
DE APPR.	ST	<small>COPYRIGHT © 2012 BY DART AEROSPACE LTD          THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS          NOT TO BE USED FOR ANY PURPOSES, OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT          WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	
DATE	13.03.08		